

**Dearborn to Kalamazoo Corridor Acquisition and Improvements
Dearborn to Kalamazoo
Michigan**

Federal Railroad Administration

FINDING OF NO SIGNIFICANT IMPACT

The Michigan Department of Transportation (MDOT) has proposed to acquire and then to construct certain improvements (the Project) to a 135-mile section of rail line, currently owned by Norfolk Southern Railway (NS), which extends from Dearborn to Kalamazoo in southern Michigan (the Line). Specifically, the Project consists of a series of infrastructure investments to the Line between milepost (MP) 7.5 and MP 143.7, including upgrading the existing signal system, adding positive train control (PTC), grade crossing improvements, and replacing track, ties, and ballast to bring the line into a state of good repair and to allow 110-mph passenger operations. In addition, the Project would involve acquisition of the Line to establish long-term stability for corridor maintenance and operations.

The Project would support the existing National Passenger Railroad Corporation (Amtrak) service between Detroit-Pontiac, Michigan and Chicago, Illinois, as well as the planned Midwest High Speed Rail service between Detroit and Chicago. The NS Line is part of a federally-designated High Speed Rail (HSR) corridor. Freight and passenger rail services currently operate on the Line. Because of a decline in freight business along the Line, NS has indicated that it can no longer justify maintaining track standards to allow for passenger trains to operate at 79 mph. NS has stated that their existing freight business only requires that the track be maintained to allow for train operation at 25 mph. As a result, NS has started implementing a plan to downgrade the Line over the next few years by issuing a series of time table speed reductions. The initial series of time table speed reductions were issued on July 1, 2010, and reduced passenger speeds from 79 mph to 60 mph on 41.2 miles of track (from Ypsilanti to Battle Creek at MP 28.1 to MP 51.9 and MP 124.4 to MP 132) and to 25 mph on a few shorter segments of the Line (took effect in July, 2011). NS plans to issue an additional series of time table speed reductions over the next few years, and will expand 60 mph passenger speeds to the entire Line by the end of 2012.

Amtrak, with assistance from NS, performed a study to determine the infrastructure upgrades needed to provide 110 mph passenger train service on the Line, in the event that federal funding became available to acquire and improve the Line.

The Federal Railroad Administration (FRA) issued a Notice of Funding Availability (NOFA) for the High-Speed Intercity Passenger Rail (HSIPR) Program in April, 2010. MDOT was selected by FRA for Phase 1 of the Kalamazoo Service Development Program (the Program), which consists of the acquisition of the Line. In 2011, MDOT was also selected for funding under

FRA's HSIPR Program for Phase 2 and Phase 3 of the Program, which consists of track rehabilitation and signal improvements that would allow passenger trains to travel at 110 mph for 235 miles, 77 percent of the full Chicago to Detroit corridor, with an average train speed that would be 21 mph greater than the current train speed, resulting in a 30 minute reduction in trip time.

MDOT prepared an Environmental Assessment (EA) for the Project in compliance with the National Environmental Policy Act (NEPA) and FRA's environmental procedures (64 FR 28545, May 6, 1999).

Purpose and Need

The purpose of the Project is to improve safety (by upgrading the infrastructure and signals, adding PTC, and improving railroad grade crossings) and to provide greater passenger rail mobility on the Line (by increasing train speeds to 110 mph and by improving passenger rail service travel time and reliability). The Project would provide an enhanced passenger rail alternative to auto and air travel, which would also promote environmental benefits in the region such as: reduced air pollution emissions, improved land use options, and fewer adverse impacts to the surrounding habitat and water resources. In addition, the Project would improve access for the communities in Michigan, support existing industries, foster growth of new and small businesses and encourage large businesses to distribute their operations throughout Michigan. The Project need is also derived from travel delays experienced by passenger and freight users of the Line occurring as a result of the degradation of the Line (and NS's plan to continue to lower speeds on the Line). The Project would also help to address automotive congestion along the I-94 corridor that runs parallel to the Line, and which results in travel delays and increased transportation costs for highway users.

Alternatives

The proposed Project is located in southern Michigan, beginning in Kalamazoo (MP 143.7) and ending at the Dearborn town line (MP 7.5).¹ The Project traverses through five counties in southern Michigan – Kalamazoo, Calhoun, Jackson, Washtenaw, and Wayne – and serves the cities of Kalamazoo, Battle Creek, Albion, Jackson, Ann Arbor and Dearborn. The Line is currently owned by NS, one of the major freight carriers in Michigan. Freight service on the Line includes approximately eight round trips a day.

Two alternatives were considered for the proposed Project, the No-Build Alternative and the proposed action. There are no other reasonable action alternatives to the proposed action and the build alternative under consideration involves no additional right-of-way (ROW) acquisition, and

¹ Between MP 120.54 and MP 121.89, passenger rail services run along a small section of Canadian National-owned right-of-way. No improvements on that section are proposed as part of this Project.

does not involve significant social, economic or environmental impacts. In order to conduct the infrastructure investments, which are predominately maintenance activities, to ensure that a state of good repair is maintained on the Line, and to safeguard the reliability of passenger rail service along the Line, a change in ownership of the Line is needed.

No-Build Alternative

The No-Build Alternative involves taking no action to acquire or improve the Line. The Line would remain operational, would decline from the current average speed of 55 mph, and would provide for the operation of 3 daily round trip passenger rail trains. However, NS has indicated to Amtrak and MDOT that they no longer have a business need to maintain the Line to support freight traffic speeds above 25 mph, and that they plan to allow the Line to degrade and expect to issue a series of slow orders to decrease allowable speeds over the next few years. Consistent with this indication, NS issued a series of time table speed reductions on July 1, 2010, reducing speeds from 79 mph to 60 mph on 41.2 miles of the Line (from Ypsilanti to Battle Creek at MP 28.1 to MP 51.9 and MP 124.4 to MP 132) and to 25 mph on a few shorter segments of the Line. Additional slow orders are expected that would gradually reduce speeds to 60 mph on the Line by the end of 2012. NS has also indicated that it would allow the Line to further degrade after 2012, which would further impede any efforts to improve passenger service.

Under the No-Build Alternative, there would be no upgrades or improvements to the Line, other than routine maintenance to the track and signal systems. The average speed on the Line would decrease by 7 mph due to degradation (resulting in a 56-minute travel time increase for passengers traveling between Pontiac, Michigan and Chicago, Illinois as documented in Amtrak's report entitled *The Amtrak Study for the NS Railway Section from Dearborn to Kalamazoo* (2010).

In addition, the No-Build Alternative would not improve the level and quality of passenger rail service in southern Michigan, and would hinder opportunities for economic growth and for strengthening Michigan's manufacturing, service, and tourism industries. The No-Build Alternative would not only contribute to the degradation of the passenger rail service within the Project area, but would also degrade passenger rail service along the entire rail corridor between Chicago and Detroit/Pontiac, and would negatively impact rail project investments along that corridor. Service benefits from past and recently selected HSIPR projects along the Chicago-Detroit/Pontiac rail corridor would be offset by the degradation in the Line.

The No-Build Alternative does not meet the Project's purpose and need of improving the safety of the existing rail service, providing greater mobility by increasing train speeds, bringing long-term stability and a state of good repair to the corridor through acquisition of the Line, improving access for existing industrial communities and fostering business growth, or promoting environmental benefits.

Proposed Action

The Project consists of a series of infrastructure investments to the Line, including upgrading the existing signal system, adding PTC, grade crossing improvements, and replacing track, ties, and ballast to bring the Line into a state of good repair to support existing train frequencies of approximately 14 passenger and freight trains per day and to allow 110-mph passenger operations. In addition, the Project would involve acquiring the Line to establish long-term stability for corridor maintenance and operations. The acquisition is subject to Surface Transportation Board (STB) approval. The Project would be implemented in three phases, which would overlap and/or occur concurrently, as described below:

Phase 1: Right of Way Acquisition and Final Design

In Phase 1, MDOT would refresh existing appraisals of the Line, negotiate and complete an acquisition of Line, and would then complete final design for Phases 2 and 3. The amount of funding for the acquisition and final design work of Phase 1 is dependent upon the appraisals conducted and the specific acquisition terms agreed to by the parties. There is up to \$150 million in federal funding available for such Phase 1 costs (which does not include the required 20 percent non-Federal matching funding from MDOT). The proposed acquisition of the Line would allow MDOT to proceed with infrastructure improvements to bring the Line into a state of good repair. These improvements would allow for increasing passenger train speeds up to 110 mph once the Project is complete.

Phase 2: Track Rehabilitation Investments

In Phase 2, MDOT would rehabilitate the track, including replacing 206,000 ties and replacing the ties at switches and crossings along the entire length of the Line. The track within the ROW would be surfaced with an average raise of 1.5 to 2 inches on clean new ballast. There are 48 public crossings from MP 25.30 at Willow Run to Kalamazoo that would be upgraded. MDOT would also rebuild highway-rail crossings (or replace track structures at crossings entirely, as required). Such crossing maintenance would include approximately 180 track crossing panels in 137 public crossings and approximately 74 crossing panels in 65 private crossings.

MDOT would install up to 60 ribbons of continuous welded rail (CWR) to replace worn second-hand rail in curves that need to match new rail in highway-rail crossings (48 highway crossings are in curves). Finally, under Phase 2, MDOT would conduct a second surfacing on curves to achieve targets for super-elevation and a third pass for curves where the transition spirals needed to be changed. Funding for the construction of Phase 2 consists of approximately \$60 million in federal funding.

Phase 3: Train Control/Signal Investments

In Phase 3, MDOT would improve the train control/signals, including replacing the existing obsolete NS signal system with a PTC system. During Phase 3, MDOT would install fiber optic communication along the entire Line, providing the foundation for the subsequent train control

and signal work activities. The renewal of the signal system would include the installation of PTC, active warning devices and four-quadrant gates at grade-crossings and enhanced warning device timing. MDOT would perform these activities in a prioritized sequence to eliminate the areas where trains experience the worst train delays due to signal failures. MDOT would install new bungalows in locations to be determined during final design to contain the necessary signal equipment including, PTC equipment, and warning device activation systems and links to the rest of the system through the fiber optic network. An estimated 25 computerized servers with exact locations yet to be determined would provide information links between locations via radio and the fiber optic backbone. MDOT would install radio communications antennas at each server location to provide information to trains and to communicate with dispatch personnel. MDOT would install flashers and gates at all of the approximately 65 private crossings and would extend crossing starts in areas where train speeds could be raised to 79 mph. All of the proposed infrastructure improvements would occur within the existing railroad ROW, 50-feet from the center of the track on each side. Funding for the construction of Phase 3 is approximately \$136.5 million in federal funding. Phase 3 would be completed over three construction seasons, beginning in 2012 and concluding in 2014.

Benefits of the Selected Alternative

The Project was identified as the Preferred Alternative in the EA because it meets the purpose and need, and, compared to the No-Build Alternative, it provides the greatest benefits for passenger and freight rail service.

The Project, which is part of the Chicago-Detroit/Pontiac High Speed Rail corridor, would: provide benefits to the surrounding communities through improved mobility options, including for the elderly and people with disabilities; increase accessibility for economic development; reduce congestion; improve grade crossing safety; and provide environmental benefits, such as reduced air pollution emissions.

While the Project does not directly increase track capacity, the resulting service benefits would likely result in increased ridership and possibly longer passenger trains. Additionally, the improvements in reliability and travel time could indirectly benefit land use by providing a stimulus to new development, particularly in the vicinity of stations that are located within a reasonable commuting time of employment centers, and on sites where it would be feasible to construct a railroad spur.

Environmental Consequences

MDOT has analyzed the Project's environmental impacts in the EA. Based upon the EA, included by reference in this FONSI in its entirety, FRA has concluded that the Project, including proposed mitigation measures for unavoidable impacts, would have no foreseeable significant impact on the quality of the natural and human environments. This FONSI focuses only on those resources that have a reasonable likelihood to be affected by the proposed action.

The following resources would not be affected by the Project: solid waste disposal systems; ecological systems; use of water, mineral, or timber resources; and wild and scenic/natural rivers. Thus, these resources are not discussed in this finding.

The potential of the Project to result in an environmental impact is described as follows.

Air Quality

The Project is located within five Michigan counties: Kalamazoo, Calhoun, Jackson, Washtenaw, and Wayne. All counties are in attainment or maintenance for 8-hour ozone requirements and other criteria pollutants, except Washtenaw and Wayne Counties which are in nonattainment for fine particulate matter (PM 2.5).

The Project will rehabilitate the existing track by improving track conditions and signals between Dearborn and Kalamazoo, as detailed under the Proposed Action section of this FONSI. No track capacity will be added to the existing rail corridor, and the existing volume would be maintained after the Project is constructed. An air quality conformity analysis was completed that calculated estimated emissions (in tons) for the activities associated with constructing the Project, as follows:

- Total tie replacement-206,000;
- Track resurfacing;
- Rail Replacement 100,000 linear feet;
- Switch tie replacement-3,600;
- Renewing signals and train controls;
- Warning devices installation
- Repair of grade crossing; and
- Installation of the Positive Train Control (PTC)

The equipment and horsepower used for each activity, and in most cases, operational time was provided by MDOT. In those cases where information regarding operational time was not provided, assumptions were made, as documented in the EA. Project construction is estimated to take place over a two to three year period. However, since a proposed schedule of activities per county is not currently available, it was assumed for the worst case scenario that the construction and maintenance activities in any one county will occur during the same year.

A comparison of estimated emissions to the de minimis thresholds (indicated in 40 CFR 93.153) determined that the Project will not require a formal conformity determination for activities in

any county because projected emission levels would be below the applicable de minimis thresholds.

The Project does not have the potential to exceed the NAAQS, or lead to the establishment of a new nonattainment area, or delay achievement of standard attainment. The Project will, over time, improve the air quality in this railway section by travelers diverting from air, bus and auto to rail travel.

Since the Project would not create a new, permanent source of air pollution, no significant impacts on air quality are expected.

Noise and Vibration

Existing passenger and freight rail activity at existing crossings, and vehicular traffic on adjacent roadways, account for the majority of the existing noise and vibration present in the Study Area.

The Project does not include any new service or an increase in the number of daily trains. The areas along the Line are already accustomed to noise from rail traffic, both freight and passenger. The Project would moderately increase noise levels as passenger train speed is raised from 79 mph to an anticipated 110 mph. However, this increase would be offset by decreased noise with the installation of continuous welded rail (CWR). The upgrade of the existing rails from jointed to CWR would eliminate the clacking noise typically associated with trains and would decrease the overall noise levels.

There are no ground-borne vibration or noise impacts expected from the Project. The Project will have no significant impact in terms of noise and vibration.

Water Quality

The existing Line crosses municipal wellhead protection areas (WHPA) in Chelsea, Jackson, Albion, and Kalamazoo. Existing railroad land use was taken into account during the development of these WHPA. In addition, there would not be new impacts to the WHPAs. The proposed action would not create a significant amount of impervious area or require a new WHPA to be built. Construction impacts would be limited to potential occurrences of sediment runoff, which will not affect groundwater. As such, there would be no significant impacts to the WHPAs.

The existing Line also crosses and is directly adjacent to waters of the State of Michigan, including lakes, streams, county drains, and four major rivers, at approximately 86 locations. Seven of the 86 crossing locations are water-bodies that are considered especially sensitive to water quality alterations. Three of the streams, Rice Creek, Augusta Creek and Canal Race, are classified as trout streams. Four crossing locations, the Rouge River, Geddes Pond/Huron River, the Huron River, and the Grand River do not meet State water quality standards and have approved Total Maximum Daily Loads (TMDLs) for pollutants, including *Escherichia coli* (*E. coli*), biota, and dissolved oxygen.

The Project would not cause an increase in stormwater runoff, generate wastewater, or alter surface or subsurface drainage to any waterbody. Any short term impacts resulting from construction activities would be minimized and mitigated by use of Soil Erosion and Sedimentation Control measures and measures set forth in the required National Pollutant Discharge Elimination System permits. These permits include post-construction requirements on new development, as well as stormwater controls during construction, for projects that disturb more than one acre. MDOT is required to develop, implement, and enforce stormwater management programs designed to reduce the discharge of pollutants from the MDOT drainage system to the Maximum Extent Practicable (MEP) and is required to employ Best Management Practices (BMPs), such as silt fences, check dams, and appropriately sized sediment basins. Following construction, permanent BMPs would be implemented to further reduce impacts as needed. These permanent BMPs may include permanent seeding, establishment of no mow zones near and/or adjacent to water courses, detention basins with restricted outlets, and the use of native vegetation incorporated into the final landscape design.

There is no Essential Fish Habitat in the State of Michigan, as defined by the National Marine Fisheries Service. However, the majority of water-bodies support various communities of fish species. Any work within the channel of streams or rivers is regulated by the Michigan Department of Environmental Quality (DEQ) and would require a permit under Part 301 of P.A. 451 (1994, as amended). In cooperation with the resource agencies, MDOT would employ avoidance, minimization and mitigation strategies to protect aquatic species and their associated habitats during design and construction. Measures may include, but are not limited to, seasonal work restrictions and preservation of fish passage.

Based on the proposed improvements to the Line, which include replacing ties and surface lines, track resurfacing, upgrading signals and train controls, and adding warning devices, the Project would not have an impact on groundwater or surface water quality. In the long term, these improvements would not cause an increase in stormwater runoff, generate wastewater, or alter surface or subsurface drainage to any waterbody. As such, the Project would have no significant impact on groundwater, surface water quality, or fish species and their habitat.

Permits

A new DEQ National Pollution Discharge Elimination System (NPDES) permit is issued to MDOT every five years. Because this Project would disturb more than one acre, the conditions of the current NPDES permit related to management of stormwater runoff from the construction site as well as management of stormwater from the completed Project would apply.

Because this Project would disturb more than five acres, a Notice of Coverage must be filed with DEQ, including a copy of the Soil Erosion and Sedimentation Control (SESC) permit, a location map, a copy of the SESC plan for the Project, the name and certification of the responsible stormwater operator, and a filing fee. The contractor would have a documented program and adequate procedures to comply with applicable soil erosion and sedimentation control

regulations and shall control erosion and prevent sediment related to the Project from entering waters of the State of Michigan or leaving the ROW. MDOT must ensure that the site is inspected by a certified construction stormwater operator once per week, and within 24 hours after every precipitation event that results in a discharge from the site, to ensure that any needed corrective actions are carried out.

Energy Conservation and Use

The short and long-term environmental impacts of construction would be minimized through resource conservation, and the use of energy-efficient and ecologically responsible materials, systems and techniques. Once construction has been completed, the Line will be more efficient for passengers and may encourage a mode-shift from automobiles to transit, which could reduce energy consumption.

The Project would have no significant impact in terms of energy conservation and use.

Prime and Unique Farmlands

A review of the Line indicates that there are Michigan Farmland and Open Space Public Act 116 (PA 116) parcels adjacent to rural areas. However, since none of these lands would be acquired in these rural areas, a PA 116 review is not required. The Project does not require conversion of agricultural land, grading permits, or easements for any of the planned improvements.

The Project would not have a significant impact on prime and unique farmland.

Wetlands

Based on the National Wetlands Inventory (NWI) mapping, wetlands are located along the Line. The Line includes a number of culverts and bridges to allow streams to flow beneath the railroad embankment. The proposed improvements do not include any alterations of existing bridges.

During final design, MDOT would review the Project to ensure that the proposed improvements do not extend beyond the existing railroad embankment. If staging areas, temporary access roads, or other temporary features are identified during final design, MDOT would determine whether wetlands are impacted, and would ensure that practicable measures are evaluated to avoid and minimize such impacts. If temporary impacts are identified, but they cannot reasonably be avoided, these impacts will be mitigated. By special provisions of the construction contract, the contractor would be required to evaluate the potential for wetland impacts resulting from the chosen construction sequence, access points, maintenance of traffic, and methods of construction. If impacts are identified, the contractor would be required to prepare a Michigan Department of Environmental Quality (DEQ) permit application for submission to, and review by, MDOT.

The Project would have no significant impact to wetlands.

Ecologically Sensitive Areas and Threatened or Endangered Species

The U.S. Fish and Wildlife Service (USFWS) and the Michigan Department of Natural Resources (MDNR) Wildlife Division were contacted to determine the potential presence of federal or state-listed threatened or endangered species.

According to the USFWS, an area of concern for the Line includes one federally endangered animal species, Indiana Bat; and, one federal candidate animal species, Eastern Massasauga Rattlesnake. No federally listed plant species are known to occur within the Project corridor. The Project would not impact the federally endangered Indiana Bat because the Project would not require the cutting of trees that have the potential to serve as either roosting or maternity sites within the existing ROW or at existing stations, based upon site inspections conducted in 2009.

The federal candidate species, Eastern Massasauga Rattlesnake, would not be affected since the proposed work would take place within the ROW areas that do not offer suitable hibernation, basking, or foraging habitats.

In addition, a Phase I Endangered Species office review was completed for state animal and plant threatened and endangered species identified below that are protected by the State of Michigan's Natural Resources and Environmental Protection Act, Act 451 of the Public Acts of 1994, Part 365.

The Project would not directly or indirectly impact any of the state listed threatened or endangered animal species or their habitat, including those that are known to occur within the Kalamazoo River and the Huron River. There are turtles of conservation concern associated within the Project area, including the Eastern Box Turtle, *Terrapene carolina carolina* and Blandings Turtle, *Emydoidea blandingii*, and the state threatened Spotted Turtle, *Clemmys guttata*. The Project would not have permanent impacts to these species, as their habitat (streams, rivers, and wetlands) would not be impacted by the project. Suitable upland habitat for terrestrial vertebrate species beyond the existing ROW would not be permanently affected. However, the Eastern Box Turtle and Blanding's Turtle are more terrestrial in their habit during the warmer months of the year. These two species may avoid using resources directly adjacent to the tracks when work activity is taking place and, as such, the construction activity could have a temporary effect to the species. Commitments to address these temporary impacts are identified later in this document.

The Project area contains 22 state listed plant species at multiple locations which are listed as endangered (E), threatened (T), or special concern (SC) in the State of Michigan. In addition, there are documented ecologically sensitive natural areas located adjacent to the Line. A detailed plant survey completed in the summer of 2011 at known site locations indicates that these plant species would not be impacted because of their distance from the Line (more than 1500 feet). Several of these species, where found, also have natural vegetative buffers that will protect them from potential impacts.

In areas where surveys have not been completed, impacts may occur to unidentified state listed endangered, threatened or special concern plant species during construction. Additional commitments are described later in this document to address potential construction impacts to these species.

Floodplains

All of the major rivers and their tributaries that cross this Line have Federal Emergency Management Agency (FEMA) - Flood Insurance Rate Mapped (FIRM) 100-year floodplain areas. The elevation of the existing railroad embankment is above the 100-year flood elevation. Although 1.5 to 2 inches of new ballast would be added to prepare the railbed for the proposed track improvements, this addition of ballast would not occur within the 100-year floodplain. The existing footprint of the roadbed within the Project area would not be expanded. There would be no alteration of any existing structures and no direct or indirect impacts to floodplains.

The Project would not result in an impact to natural and beneficial floodplain values, specifically, flood attenuation and storage, water quality, groundwater recharge, biological productivity of fish and wildlife, and agricultural and forestry resources. The Project would not directly or indirectly support new development in floodplains because existing local ordinances are sufficient to prevent new development from proceeding in floodplains, and there is no shortage of available development sites outside the floodplain limits. The infrastructure improvements associated with the Project would not occur within the limits of the 100-year flood, would not change the opening beneath any structures or culverts, and would not result in flooding of a community's sole evacuation route. Therefore, the Project would not increase the risk of flooding and would not result in impacts to human safety, health, and welfare.

The Project would not result in significant impacts to floodplains.

Coastal Zone

The Line is outside of the Michigan Coastal Zone Management Boundary. Therefore, no federal consistency review from DEQ is required.

There are no coastal barrier resources, critical dunes or high risk erosion areas immediately adjacent to the Line. As such, the Project would not impact coastal resources.

Navigable Waterways

The Line traverses three major Michigan rivers and their tributaries: the River Rouge, the Huron River, and the Kalamazoo River. Currently, Section 404 of the Clean Water Act is delegated to the State of Michigan.

According to the US Army Corps of Engineers (USACE) Detroit District List of Navigable Waters of the U.S., updated in 2010, the upper limit of navigability, and the jurisdictional cut-off for USACE on the River Rouge is the Michigan Central Railroad/Penn Central Railroad bridge

near Schafer Road in Melvindale, upriver from the Turning Basin. This jurisdictional cut-off is downstream of the easternmost limit of the Line. The jurisdictional cut-off for the Huron River is the US-24 bridge at Flat Rock, which is also downstream of the Project area in this watershed. Jurisdictional authority for the Kalamazoo River extends from Lake Michigan approximately 31.5 miles upriver to the Allegan Dam, which is downstream from the westernmost limit of the Project area.

All of the watercourses traversed by the Line are located upstream, or outside of, the jurisdictional boundaries of the USACE, and do not fall under the definition of navigable waters under the Rivers and Harbors Act of 1899. Therefore, coordination with USACE is not required.

The Project would have no significant impact on navigable waterways.

Transportation

The Project would reduce congestion for passenger and freight trains operating on the Line. Travel times for both passenger and freight trains would be reduced and on-time arrival rates would improve due to increased train speeds and fewer delays. In addition, improvements to the existing signal system would safeguard and improve the efficient flow of passengers and freight, and would reduce delays by 12 minutes for passenger rail trains. As a result of the reduction in delays, passenger and freight rail travel would be more reliable and predictable. Furthermore, reductions in travel time and increased reliability could result in a moderate reduction in shipping costs and may attract new rail freight shipments to the corridor, as well as new businesses that rely on rail for freight shipment. These beneficial effects for freight rail could extend throughout Michigan and into the Midwest.

The Project would likely result in an increase in passenger rail ridership that could be accommodated with current train frequencies, which would reduce traffic congestion and travel demand on the adjacent I-94 highway corridor from Dearborn to Kalamazoo. The Project would not be expected to delay vehicular traffic at rail crossings or increase traffic congestion (the increased train speeds would reduce the delay time at highway-rail at-grade crossings).

The safety of pedestrians and bicyclists would not be impacted by higher speed trains resulting from the Project, as the railroad crossings would employ signals and four-quadrant gates. Furthermore, pedestrians and motorists would not experience any permanent change in travel patterns because all of the proposed crossing locations already exist.

During Project construction, there would be some impact on both rail traffic and vehicular traffic. Current freight service on the Line is approximately eight trains per day. Current intercity passenger rail service on the Line is six one-way trains per day. Working in conjunction with the local communities and stakeholders, construction would be scheduled for non-peak times, including nights and weekends, to minimize the impact to existing services. Passenger and freight rail traffic would be slowed through each construction site, resulting in a temporary increase in travel time; however, the number of trains would not be reduced.

During the construction of the Project, MDOT would close each of the railroad crossings and divert vehicular traffic to the nearest crossing remaining open during construction. Work on each of the crossings would take 3-4 days. It is expected that track infrastructure improvements and train control and signal improvements would be done over three construction seasons.

Track crews are flexible and would be scheduled to complete work during non peak times including nights and weekends. Proper permits would be obtained for detours needed on the railroad crossing upgrades. Signage will be provided to direct vehicles along the detour route, and to advise of the expected duration of the detour.

The Project would not result in significant adverse impacts to transportation.

Land Use

The existing Line in southern Michigan is approximately 135 miles in length and runs adjacent to multiple land use types. A review of city, township, and county master plans, zoning maps and aeriels (2009) of the Project area were used to determine the land use types. These land use types include: agricultural, commercial, industrial, residential, and recreational. Most of the existing Line runs through rural/agricultural areas, with the stations located in urban areas.

The infrastructure improvements associated with the Project would occur within the existing ROW. These proposed improvements would not directly change land use in the Project corridor, nor would it change the land use patterns in the region or affect future development patterns beyond what is already existing or planned.

The improvements in reliability and travel time could indirectly affect land use by providing a stimulus to new development, particularly in the vicinity of stations that are located within a reasonable commuting time of employment centers, and on sites where it would be feasible to construct a railroad spur.

The Project would not result in significant impacts in terms of land use.

Socioeconomic Resources

The Project would have a positive effect on the communities along the corridor by generating new construction and permanent jobs, providing more efficient access to employment centers located along the Line, reducing congestion on highways, reducing air and noise pollution by removing conflict points between passenger and freight trains, and improving train speeds. The Project would also complement the other proposed rail improvements in southern Michigan, Indiana, and Illinois by reducing delays and increasing train speeds.

Community Facilities

A number of community facilities and services are found along the Line. However, construction of the Project is within the existing Line right-of-way and would not adversely affect these or any other community facility in the Project corridor.

Demographics

The Line traverses through many large metropolitan areas, as well as rural areas, in southern Michigan. The U.S. Census Data Estimated 2009 Total Population for each county within the Project area varies from over 1.9 million people in Wayne County to 135,616 people in Calhoun County. The Project would not displace any businesses or residences and would not adversely affect the demographics of the study area.

Economic Resources

Currently, Michigan has one of the highest unemployment rates in the Country. Michigan's statewide average unemployment rate is almost 11 percent, while the national average is approximately 9 percent (January, 2011).

MDOT used the Regional Input-Output Modeling System (RIMSII) methodology to forecast employment effects of the construction activities. The Project would generate 265 construction jobs and would generate 1,770 permanent jobs after the first year of the improvements being completed. Within five years of Project completion, 2,650 permanent jobs would be generated as a result of the Project (MWRRS Service Development Plan – Chapter 11 of the Project Notebook). New employment opportunities may be generated by businesses in the area that may wish to expand their operations or open new businesses to accommodate people who seek services within close proximity to the stations along the Line. Construction jobs and permanent employment opportunities would help the state and local economy and would improve the commodity flow at national and international levels.

Community Cohesion

The Project would have temporary impacts on communities adjacent to the Line during construction of the proposed improvements. Such temporary impacts would include temporary delays at railroad crossings, temporary changes in traffic patterns, and additional construction noise and dust during the construction.

Safety and Security

The Project would improve safety along the Line by adding additional signals and crossing gates, including four-quadrant crossing gates that would block all highway lanes when trains pass through crossings. The installation of signalization and grade crossing improvements along the Project would also benefit passenger and freight users by increasing reliability and reducing travel times. There are existing security cameras and lighting at train stations and crossings. No additional security measures would be implemented as part of this Project.

Possible Barriers to the Elderly and Handicapped

No barriers to use by the elderly or the handicapped have been identified for the Project.

Environmental Justice

The Project would not cause a disproportionately high and adverse effect on minority and low-income population groups. The Project would have a positive effect on minorities and low-income populations by improving accessibility and mobility and by generating construction jobs, as well as permanent jobs for these communities. The Project would also reduce noise and air pollution, and would significantly reduce passenger and freight train conflict points, if not totally eliminate them, in southern Michigan. The Project would not displace minority and low-income residents or minority owned businesses.

The Project would not result in significant adverse impacts to minority or low-income communities.

Cultural Resources

Architectural Resources

There are 40 above-ground cultural and historic resources in the immediate vicinity of the Project area. The Area of Potential Effect (APE) consists of the Line itself, existing crossings, and 500 feet in any direction of the National Register of Historic Places (NRHP) eligible or listed stations. A determination of No Adverse Effect under 36 CFR 800.5(b) was concurred upon by the State Historic Preservation Office (SHPO) on August 17, 2011 based on the conditions as listed below:

- The railroad work would occur in the existing ROW. This Line has been an active rail line since its original construction and previously was operated as a double track rail line;
- No existing public crossing would be closed;
- No permanent easement or fee ROW would be acquired from historic above-ground resources (proximity assumed to be within 500 feet of the resource);
- All decorative fence installation is approved by an MDOT Historian: The decorative fence is proposed for a limited number of locations. While the woven wire and/or chain link fence is unobtrusive, the decorative fence is meant to stand out and may not be appropriate in some situations;
- No rehabilitation work on railroad bridges would occur aside from normal maintenance;
- No masonry culverts would be replaced; and
- All track work off existing ballast, or work involving crossing closures, crossing installation or improvements, pedestrian crossing installation or improvements, Americans with Disabilities Act (ADA) compliance, and/or platform installation or improvements, within 500 feet in any direction of eligible or NRHP-listed depots, freight houses, express buildings, coaling stations, interlocking towers, etc., must be approved by an MDOT Historian.

Archaeological Resources

The Area of Potential Effects (APE) is confined to the existing Line ROW, which has been an active rail line since its original construction, and historically was a double track rail line. MDOT reviewed the state archaeological site files to analyze the possible impacts to previously recorded archaeological/cultural sites in or adjacent to the Line. The site file search identified 17 archaeological sites that possibly overlap the existing Line. Since the Project would not extend outside the existing ROW, the Project would have no adverse effect on the seventeen identified sites or on any other archaeological/cultural sites possibly located along the Line. The Office of the State Archaeologist (OSA)/SHPO concurred that the Project would have no effect on archaeological sites.

Section 4(f) Properties

Section 4(f) of the U.S. Department of Transportation Act of 1966 (as amended) prohibits the use of publicly-owned land from any park, recreation area or wildlife/waterfowl refuge or land from a historic site of national, state, or local significance for transportation Projects unless (1) there is no prudent and feasible alternative to the use; and (2) the proposed Project includes all possible planning to minimize harm.

Recreation Areas

A review of aerial photos and topography maps indicate that there are 27 public recreational properties including parks, athletic fields, nature areas, and a golf course located adjacent to or in the vicinity of the Line. However, no temporary or permanent ROW or easements would be required from any public recreational property, and access would be maintained to the public recreational properties, including trails, during construction.

Temporary impacts such as construction noise and dust may occur, however these impacts would be limited because construction activities would persist for only short periods of time (2-3 days).

Historic Properties

There are numerous historic properties, both above-ground and archaeological, as previously noted. Use of a Section 4(f) property occurs when there is a permanent incorporation of that property into a transportation Project. Temporary occupancies that are adverse in terms of the statute's preservation purpose are also considered uses.

Since the Project would not extend outside the existing ROW, the Project would have no adverse effect on the seventeen identified sites or on any other archaeological/cultural sites possibly located along the Line.

The Project would have no use of recreational or historic Section 4(f) properties.

Hazardous Materials

Hazardous materials are not expected to be encountered during Project construction, and bulk transport of hazardous materials is not expected to occur as a result of this Project. However, the Project may result in the movement of limited quantities of hazardous materials necessary for construction. All hazardous materials would be transported in accordance with federal Hazardous Materials Regulations found in Title 49 of the Code of Federal Regulations. Additionally, the U.S. Department of Transportation enacts and enforces all hazardous material shipping laws, and compliance with these requirements would be overseen by the owners of the trains or trucking companies.

The Project would have no impact in terms of hazardous materials.

Hazardous Waste

The Project would not likely encounter hazardous waste. However, if hazardous waste was encountered, MDOT or their contractor would coordinate with the DEQ regarding the appropriate treatment and disposal options of such waste, consistent with Part 111 of Public Act 451 of 1994, and amendments. In addition, proper precautions would be taken during construction to ensure that construction workers are not exposed to hazardous materials.

A preliminary assessment of the Project area indicates that limited quantities of contaminated media (soil, debris) may be encountered or generated during construction. The exact location of such contaminated media would not be known until encountered/generated by construction activities. Based on past sampling of this type of media, levels of contamination are not expected to have hazardous characteristics as defined by the Environmental Protection Agency (EPA), and therefore would not be classified as hazardous waste. All contaminated media generated during construction would be disposed of in accordance with state and federal laws at a licensed disposal facility.

The proposed improvements in the Line would not result in impacts to either shallow aquifers or deeper drinking water sources. A review of the DEQ database revealed no areas of ground water contamination or leaking under storage tanks (LUST sites).

The Project would have no significant impact in terms of Hazardous Waste.

Construction Impacts

Construction of the Project would create temporary noise impacts and temporary impacts to air and water. MDOT would ensure that the construction contract specifications require that the selected construction contractor adhere to all federal and state noise abatement and control requirements. Noise would be controlled by measures such as, but not limited to, ensuring construction equipment is in good repair and fitted with manufacturer recommended mufflers.

MDOT will also require the use of measures that reduce engine activity or reduce emissions per unit of operating time. Construction equipment would be kept clean and in good operating condition. MDOT's Standard Construction Specification Sections 107.15(A) and 107.19 apply

to control fugitive dust during construction and cleaning of haul roads. All MDOT vehicles and equipment must follow MDOT Guidance #10179 Vehicle and Equipment Engine Idling. Additionally, sediment and erosion control measures would be used to minimize any water quality impacts during construction. Any minor temporary water quality impacts would cease upon completion of construction.

During construction, the Project would impact vehicular traffic by detouring vehicular traffic to the next available railroad crossing. However these impacts would be short-term and coordination with the local populace would be undertaken in order to notify motorists and non-motorists of the detour routes. The use of detours would also have temporary impacts on residents and business owners that live in proximity to the construction area. These short-term impacts to motorists, non-motorists, residents, and business owners include: longer travel times; changes in traffic patterns; increase in ambient noise levels; and fugitive dust.

During the construction of the Project, MDOT would close each of the railroad crossings and would divert vehicular traffic to the nearest crossing remaining open during construction. Work on each of the crossings would take 3-4 days. It is expected that track infrastructure improvements and train control and signal improvements would be done over three construction seasons.

Implementation of the Project would not result in significant construction impacts.

Indirect and Cumulative Impacts

The Council on Environmental Quality (CEQ) regulations define indirect (secondary) impacts as those that are "...caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR § 1508.8b). Cumulative effects are defined as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR § 1508.7).

There are no growth-inducing indirect effects which are reasonably foreseeable as a result of the project. Proposed improvements to the Line, together with other foreseeable Chicago-Detroit/Pontiac High Speed Rail Corridor improvements, would cumulatively provide benefits to the communities. As described in the Environmental Assessment, these benefits include: improved level and quality of passenger rail service (mobility) for everyone including the elderly and people with disabilities, and reduction of congestion and travel times.

The proposed improvements to the facility would, over time, result in an increase in ridership, new businesses and employment opportunities, and economic growth associated with the improved mobility of the facility. The improvements in reliability and travel time could indirectly affect land use by providing a stimulus to new development, particularly in the vicinity of stations that are located within a reasonable commuting time of employment centers, and on sites where it would be feasible to construct a railroad spur. These cumulative impacts resulting from the economic benefits of growth may result in additional impacts to natural or cultural resources. However, because of the limited impact to these resources caused directly by the project, the project's contribution to cumulative effects would be minimal.

The Project would not result in any significant adverse indirect or cumulative impacts.

Commitments and Mitigation Measures

The following Federal regulations, statutes, and orders apply to this Project:

- Clean Water Act of 1977 (33 USC § 1251-1376)
- Endangered Species Act (50 CFR 17)
- Executive Order 11988, Floodplain Management (42 Federal Register [FR] 26951)
- Executive Order 11990, Protection of Wetland (42 FR 26961)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629)
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (65 FR 50121)
- Federal Railroad Administration Procedures for Considering Environmental Impacts (64 FR 28545)
- National Environmental Policy Act of 1969 (42 USC § 4321 et seq., signed January 1, 1970)
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500–1508)
- Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC § 303)
- Section 6(f) of the Land and Water Conservation Act of 1965 (16 USC § 460)
- Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 USC § 401)
- Section 106 of the National Historic Preservation Act, as amended (16 USC § 470)
- Section 404 of the Federal Water Pollution Control Act (33 USC § 1344)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC § 61)
- Americans with Disabilities Act of 1990 (42 USC Chapter 126, and 47 USC Chapter 5)

The following Project commitments and mitigation measures have been identified for the Selected Alternative. Additional measures may also be implemented as necessary.

Air Quality

During construction, several measures may be undertaken to reduce potential emissions including engine reduction activity reduction of emissions per unit of operating time, and maintenance and upkeep of construction equipment. Construction dust associated with exposed soils would be controlled, if necessary, with the application of water and other approved dust palliatives. MDOT would also require measures that reduce engine activity or reduce emissions per unit of operating time. Construction equipment would be kept clean and in good operating condition. MDOT's Standard Construction Specification Sections 107.15(A) and 107.19 apply to control fugitive dust during construction and cleaning of haul roads. All MDOT vehicles and equipment must follow MDOT Guidance #10179 Vehicle and Equipment Engine Idling.

Noise and Vibration

MDOT would implement mitigation measures for temporary impacts, including construction contract specifications that require that the contractor adhere to Federal, state, and appropriate local noise abatement and control requirements. Noise would be controlled by measures such as, but not limited to, ensuring construction equipment is in good repair and fitted with manufacturer recommended mufflers.

Water Quality

During construction, MDOT would protect surface waters and storm sewer systems through the use and enforcement of Soil Erosion and Sedimentation Control measures and the applicable National Pollutant Discharge Elimination System Permits. These permits employ best management practices (BMPs) such as silt fences, check dams and appropriately sized sediment basins. Following construction, permanent BMPs would be implemented as needed to reduce any potential impacts to water quality. These BMPs may include permanent seeding, establishment of no-mow zones near or adjacent to water courses, detention basins with restricted outlets, and the use of native vegetation.

Wetlands

During final design, MDOT would review the Project to ensure that the proposed improvements do not extend beyond the existing railroad embankment. If staging areas, temporary access roads, or other temporary features are identified during final design, MDOT would determine whether wetlands are impacted, and would ensure that practicable measures are evaluated to avoid and minimize such impacts. If temporary impacts are identified, but cannot reasonably be avoided, they would be mitigated. Contractors would be required to evaluate the potential for wetland impacts resulting from the chosen construction sequence, access points, maintenance of traffic, and methods of construction. If impacts are identified, the contractor would be required to prepare a DEQ permit application for submission to, and review by, MDOT.

Ecologically Sensitive Areas and Threatened or Endangered Species

To address potential temporary effects to the Eastern Box Turtle and Blanding's Turtle, MDOT will include the following "Turtle Statement" to all construction plans:

"Records for protected turtles exist within or near this Project area. These turtle species warrant special consideration as they are rare in Michigan. In the event that turtles are observed within the construction zone, move the turtle(s) into adjacent vegetative cover, away from physical work activities. If possible, please take a photo and immediately contact MDOT's Ecologist, to confirm identification."

The statement would be added to the plan set and would be discussed with construction staff prior to initiating work on the Project.

Similarly, to mitigate potential impacts to the Eastern Massasauga Rattlesnake during construction, MDOT would also add the following statement to the plan set, and would discuss the statement with construction staff prior to initiating work on the Project.

"Records for the Eastern Massasauga Rattlesnake exist within or near the Project area. This venomous snake is a State Special Concern and Federal Candidate species that warrants special consideration. In the event that this species is discovered during construction, immediately move personnel away from the snake and call Richard Wolinski, MDOT Ecologist, at (517) 335-2633 for assistance."

MDOT would complete additional seasonal surveys to determine if construction impacts could occur to state listed plant species. If impacts to these species are identified then a State of Michigan Endangered Species Permit would be required from the MDNR. This permit would require avoidance and minimization strategies to lessen impacts. Work would not proceed in affected areas until a permit has been issued. If appropriate, MDOT will identify on design plans areas requiring protective fencing to avoid potential impacts to state listed species.

If individuals of protected species cannot be avoided then impacts would be documented within the permit application. If appropriate, MDOT may use habitat restoration activities to mitigate unavoidable impacts. Conditions included in the MDNR permit may also require plants to be transplanted by MDOT (when feasible) to a new location to protect them. If required, MDOT would complete monitoring after construction to document any changes to the remaining plants, populations, and sites, and to document the effectiveness of the transplanting efforts.

Floodplains

During final design, MDOT would review the Project to ensure that the proposed improvements do not extend beyond the existing railroad embankment. If staging areas, temporary access roads, or other temporary features are identified during final design, MDOT would determine whether floodplains are impacted, and would ensure that practicable measures are evaluated to avoid and minimize such impacts. If temporary impacts are identified, but they cannot

reasonably be avoided, these impacts would be identified and appropriate steps would be taken to reduce any increase in the risk of flooding during construction.

Transportation

During construction, there would be temporary impact on both rail traffic and vehicular traffic. Current freight service on this Line is approximately eight trains per day. Current intercity passenger rail service on the Line is six one-way trains per day. Working with the local communities and stakeholders, MDOT would direct track crews to be flexible and to complete work during non-peak times to minimize the impact to existing services. Passenger and freight rail traffic would be slowed through each construction site, temporarily increasing travel time, but the number of trains will not be reduced.

Vehicular traffic would be detoured. Grade crossing upgrades would require working closely with each community to ensure impacts are minimized when the work is being done. Working with the local communities and stakeholders, the duration of grade crossing upgrades would be minimized with accelerated work force crews, and scheduled at non-peak time for rail, motorized vehicles, pedestrian, and bicycles. MDOT would obtain permits for detours needed on the grade crossing upgrades. Signage would be provided to direct vehicles along the detour route, and to advise of the expected duration of the detour.

Community Cohesion

During construction, the Project would temporarily impact communities that are adjacent to the Line. There would be temporary delays at crossings, temporary changes in traffic patterns, and additional construction noise and dust.

MDOT would implement the following mitigation measures to address temporary impacts: minimizing disruption of traffic in the construction area by coordinating with local agencies and the community; placing signs in all of the construction areas notifying motorists and pedestrians; requiring that construction equipment have mufflers in good working order and that portable compressors meet federal noise-level standards for equipment; and requiring that contractors during construction would be responsible for adequate dust-control measures.

Hazardous Materials and Hazardous Waste

If hazardous waste is encountered, MDOT/contractor would coordinate with the Michigan DEQ regarding the appropriate treatment and disposal options, consistent with Part 111 of Public Act 451 of 1994, and amendments thereto. In addition, proper precautions would be taken during construction to ensure that construction workers are were not exposed to hazardous materials. All contaminated media generated during construction would be disposed of in accordance with state and federal laws at a licensed disposal facility.

In addition, design plans would be reviewed by MDOT prior to contract letting in order to incorporate any additional social, economic, or environmental protection measures. The active

construction site would be reviewed to ensure that the above measures are carried out, and to determine if additional protection is required. MDOT may employ additional control measures if concerns are identified.

Public Coordination

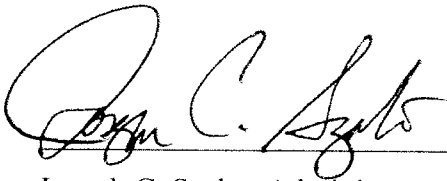
The proposed improvements are part of the Chicago to Detroit/Pontiac Corridor and part of the Midwest Regional Rail Initiative (MWRRI), for which information has been made available to the public through MDOT's public web site for several years. Most recently, the concepts of high speed rail and the MWRRI have been presented to the citizens of Michigan through the development of Michigan's State Long Range Transportation Plan. The results of public involvement for the State Long Range Transportation Plan revealed solid interest on the part of the public for increased choices in the modes of available transportation choices, and improvement in connectivity among the different modes. Long range planning at the Metropolitan Planning Organization (MPO) level has also included public involvement and dissemination of information to the public about the MWRRI and local sections of the larger Chicago-Detroit/Pontiac Corridor such as the link between Dearborn to Kalamazoo.

A preliminary Service NEPA EA was prepared in October 2009 for the entire rail corridor, which included the NS Railway Section. This document was made available for public reviewing on MDOT's public website and copies of the document were placed at various locations in Southern Michigan. MDOT received numerous comments supporting the improvements to NS Railway Line as well as other sections of the Chicago to Detroit/Pontiac Corridor.

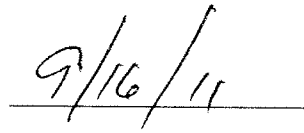
MDOT is currently completing a State Rail Plan which includes improvements to the NS Railway Line. MDOT held a series of public meeting sessions in Detroit and Battle Creek in the Fall of 2010 and another series in June 2011 at different locations throughout the state during development of the Plan. Overall, the public have strongly supported the Plan.

Conclusion

FRA finds that the Project, as presented and assessed in the attached August, 2011 EA, satisfies the requirements of FRA's Procedures for Considering Environmental Impacts, and has determined that this Project will have no foreseeable significant impact on the quality of the human environment. This Finding of No Significant Impact is based on the EA, which was independently evaluated by FRA and determined to adequately and accurately discuss the need, environmental issues, impacts of the proposed Project and appropriate mitigation measures. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.



Joseph C. Szabo, Administrator
Federal Railroad Administration



Date

This document has been prepared in accordance with FRA's Procedures for Considering Environmental Impacts by the Office of Railroad Policy and Development, with assistance from the Office of Chief Counsel. This document was prepared in September, 2011. For further information regarding this document, contact:

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